

**Remarks/Arguments:**

By this Amendment, Applicants have amended claim 1. Claims 1-7 and 9 are pending.

**Claim Rejections Under Section 102**

Claims 1, 2, 4, 6 and 9 stand rejected under 35 U.S.C. §102(b) as being anticipated by Lin. Based on this Amendment, Applicants respectfully traverse the Section 102(b) rejection.

Claim 1 is an independent claim to which claims 2-7 and 9 either directly or indirectly depend.

Claim 1 is directed to a method of manufacturing a circuit board and includes the following steps:

- **a step of superposing on a supporting member a pattern layer in which circuit pattern cavities are formed which correspond with a desired electroconductive circuit pattern,**
- **a step of filling the circuit pattern cavities with an electroconductive material,**
- **a step of removing the pattern layer from the supporting member after filling with the electroconductive material and thereby providing the electroconductive circuit pattern on the supporting member, and**
- a step of transferring into an insulating material the electroconductive circuit pattern formed by filling the circuit pattern cavities with the electroconductive material.

Applicants contend that the method of manufacturing a circuit board as defined in independent claim 1 is patentably distinguished from the Lin Patent at least based on the three

steps of the method noted above in bold. Simply put, these three steps are neither taught nor suggested in the Lin Patent.

The Lin Patent in general relates to a method of using an apparatus to transfer conductive patterns onto substrates under conditions of heat and pressure. The apparatus includes a master mold with a printing surface on which is produced a permanent mirror image of the conductive pattern to be created. This pattern is then coated with a loosely adherent film of conductive metal, such as copper, which is transferred onto a substrate to be printed.

Applicants' claim 1 requires the step "of superposing on a supporting member a pattern layer in which circuit pattern cavities are formed which correspond to a desired electroconductive circuit pattern." This step is neither taught nor suggested in the Lin Patent. In contrast, the Lin Patent discloses in Figures 1-3 a master mold 10 having voids 12, wherein the voids do not correspond to a desired "electroconductive circuit pattern" as do the cavities in the first step of Applicants' claimed invention. The voids 12, as shown in Figure 1 of the Lin Patent, are in the master mold 10 and ultimately correspond to voids in a desired circuit pattern. The voids 12 do not correspond to the desired "electroconductive circuit pattern" as defined in Applicants' claim 1.

The next step of Applicants' claimed invention is the step "of filling the circuit pattern cavities with an electroconductive material." This step too is neither taught nor suggested in the Lin Patent. In fact, this step is in sharp contrast to the method taught in the Lin Patent. In the Lin Patent, the voids 12 are filled with an insulating coating 14 as shown in Figure 2 of the Lin Patent.

The third step of Applicants' claimed invention calls for "removing the pattern layer from the supporting member after filling with the electroconductive material and thereby providing the electroconductive circuit pattern on the supporting material. This step too is neither taught nor suggested in the Lin Patent. In the Lin Patent, as shown in Figures 2 and 3, there is no removing of the pattern layer from the supporting member after filling with an electroconductive material. In contrast, the Lin Patent shows the insulating layer 14 being removed from the master mold 10 resulting in the surface of the master mold having zones of

conductive surface 16 and zones of non-conductive surface 18. This is in sharp contrast to the third step defined in Applicants' claim 1.

Based on the lack of any teaching or suggestion of at least the first three steps defined in Applicants claim 1, it is Applicants' contention that claim 1, as well as dependent claims 2-6 and 9 are patentably distinguished from the Lin Patent. On the basis of the foregoing remarks, Applicants request that the Section 102(b) rejection be withdrawn.

### **Claim Rejections Under Section 103**

Claims 3 and 5 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Lin. In view of this Amendment, Applicants respectfully traverse the Section 103(a) rejection.

As Applicants note above, claims 3 and 5 are either directly or indirectly dependent on claim 1 and therefore include the three steps noted above defined in Applicants' claimed invention. These three steps are neither taught nor suggested in the Lin Patent. Therefore, dependent claims 3 and 5 are patentably distinguished from the Lin Patent for the same reasons as noted above. Applicants therefore request that the Section 103(a) rejection based on the Lin Patent be withdrawn.

### **Allowable Subject Matter**

Claim 7 has been objected to as being dependent upon a rejected claim, but would be allowable is rewritten in independent form. Claim 7 is directly dependent on claim 1 and for the reasons stated above, claim 1 is itself in condition for allowance. Therefore there is no need for Applicants to rewrite claim 7.

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In view of the foregoing remarks and amendments, Applicants respectfully submit that claims 1-7 and 9 are in condition for allowance. Reconsideration and allowance of all pending claims are respectfully requested.

Respectfully submitted,



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Daniel N. Calder, Reg. No. 27,424  
Attorney for Applicants

DNC/ds

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P.O. Box 980  
Valley Forge, PA 19482  
(610) 407-0700

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